

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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*Ex parte* BRUCE M. DUNHAM,  
JOHN SCOTT PRICE, and  
STEPHEN W. GRAVELLE

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Appeal No. 2004-0643  
Application No. 09/682,211

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ON BRIEF

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Before KIMLIN, OWENS and PAWLIKOWSKI, *Administrative Patent Judges*.

OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from the final rejection of claims 1, 2, 4, 5, 8-11, 13-15 and 18-23, which are all of the claims pending in the application.

*THE INVENTION*

The appellants claim a device and a method for delivering radiation through a capillary tube system directly to tissue which is within a patient and has a malignant pathology.

Claim 1, directed toward the method, is illustrative:

1. A method for delivering radiation directly to a target within a patient, the target being tissue having a malignant pathology, said method comprising the steps of:

generating radiation from a portable source;

collecting radiation generated from said portable source;

coupling collected radiation to a capillary tube system;

delivering coupled radiation directly to the target through the capillary tube system.

#### *THE REFERENCE*

Vali et al. (Vali)	4,122,342	Oct. 24, 1978
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#### *THE REJECTION*

Claims 1, 4, 4, 5, 8-11, 13-15 and 18-23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Vali.

#### *OPINION*

We affirm the aforementioned rejection.

The appellants state that the claims stand or fall separately (brief, page 4). The appellants, however, do not separately argue the patentability of any claim. Consequently, the claims stand or together. See *In re Ochiai*, 71 F.3d 1565, 1566 n.2, 37 USPQ2d 1127, 1129 n.2 (Fed. Cir. 1995); 37 CFR § 1.192(c)(7)(1997). We therefore limit our discussion to one claim, i.e., claim 1.

Vali discloses a method for delivering radiation directly to a target within a patient, wherein the target is tissue having a malignant pathology (col. 6, lines 39-64), comprising generating radiation from any suitable source (col. 6, lines 29-33),<sup>1</sup> coupling the radiation to a hollow fiber waveguide (40) (col. 2, lines 46-47; col. 6, lines 29-33 and 44-46; figure 4),<sup>2</sup> and delivering coupled radiation directly to the target through the hollow fiber waveguide (col. 6, lines 38-46). Vali is silent as to whether the radiation source is portable.

The appellants do not define "portable". We therefore give this term its ordinary and customary meaning, *see Allen Engineering Corp. v. Bartell Industries Inc.*, 299 F.3d 1336, 1344, 63 USPQ2d 1769, 1772 (Fed. Cir. 2002), which is:

"1. Capable of being carried. 2. Easily carried or moved."<sup>3</sup> The radiation source illustrated by Vali (44, figure 4) is not shown as being attached to anything. Hence, this illustration would

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<sup>1</sup> There is no dispute as to whether the generated radiation is collected. The appellants acknowledge that devices for collecting radiation were known in the art (specification, page 3, item 0010).

<sup>2</sup> The appellants' capillary tube is a hollow glass tube (specification, page 3, item 0011).

<sup>3</sup> *Webster's II New Riverside University Dictionary* 916 (Riverside 1984). A copy of this definition is provided to the appellants with this decision.

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have fairly suggested, to one of ordinary skill in the art, a radiation source which is capable of being carried.<sup>4</sup> Moreover, the examiner finds that Vali's radioactive radiation source (col. 6, lines 32-33), which emits radiation naturally, does not require external power and, therefore, is portable (answer, page 5). Since the examiner's finding is reasonable and the appellants have not challenged it, we accept it as fact. See *In re Kunzmann*, 326 F.2d 424, 425 n.3, 140 USPQ 235, 236 n.3 (CCPA 1964).

The appellants argue that "the Vali reference teaches delivery of the same power level of radiation as is generated by large source[s] used in the prior art" (brief, page 5). Although Vali teaches that available x-ray tubes can be used (col. 4, lines 54-69), Vali does not indicate that these tubes cannot be portable. Moreover, Vali's teaching that the radiation intensity is adjustable (col. 6, lines 34-66) indicates that a reduced power level, such as that of a portable radiation source, can be suitable.

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<sup>4</sup> The absence in the appellants' specification of a description of the portable radiation source (page 2, items 0006 and 0009), page 3, item 0013) indicates that portable radiation sources were known in the art at the time of the appellants' invention.

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The appellants argue that their direct delivery of radiation through a capillary tube to the affected site reduces the required radiation dose and that, therefore, a portable radiation generator can be used (brief, page 6). Because, like the appellants, Vali delivers radiation directly to the affected site using a hollow fiber (col. 6, lines 38-46), Vali's required radiation dose likewise would be relatively small and, therefore, a portable radiation generator would be suitable.

For the above reasons we conclude that the appellants' claimed invention would have been obvious to one of ordinary skill in the art within the meaning of 35 U.S.C. § 103.

#### *DECISION*

The rejection of claims 1, 4, 4, 5, 8-11, 13-15 and 18-23 under 35 U.S.C. § 103 over Vali is affirmed.

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No time period for taking any subsequent action in  
connection with this appeal may be extended under 37 CFR  
§ 1.136 (a).

*AFFIRMED*

Edward C. Kimlin	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
Terry J. Owens	)	
Administrative Patent Judge	)	APPEALS AND
	)	
	)	INTERFERENCES
	)	
Beverly A. Pawlikowski	)	
Administrative Patent Judge	)	

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